



Weekly Wire
East Asia and Pacific
National Science Foundation Tokyo Regional Office
June 6, 2013

AUSTRALIA:

The Commonwealth Scientific and Industrial Research Organization (CSIRO) announced a A\$13 million (US\$12.5 million) Future Grid Cluster project between CSIRO and four leading Australian universities to develop the nation's capacity to plan and design the most efficient and low-emission electricity grid. CSIRO predicts Australian homes and businesses could be powered by over 20 different energy sources and technologies in 2050.

<http://www.csiro.au/en/Portals/Media/Preparing-the-ground-for-our-electricity-make-over.aspx>

JAPAN: Government S&T Strategy

A few more details have become available about the GOJ S&T Strategy that is scheduled to be made public in mid-June. The details include review of salary scale for foreign researchers; not restricting the amount of funding that researchers can obtain from outside sources; creating a "Strategic Innovation Creation Program" with Yen 50 billion (US\$500 million) per year to be managed by the Council for S&T Policy (CSTP); and establishing a successor program to the Funding Program for World-Leading Innovative R&D on S&T (FIRST program). The NSF Tokyo Office will produce a report on the Strategy once it is finalized.

Translation of a Nikkei article-June 1, 2013

JAPAN: NICT-NSF MOU

NSF and the National Institute of Information and Communications Technology (NICT) signed a Memorandum of Understanding that will facilitate a partnership in the areas of networking technology and the systems for future internet and new-generation networks.

<http://www.nict.go.jp/en/press/2013/05/30-1.html>

JAPAN: Next-generation 3D Printer

The Ministry of Economy, Trade and Industry will invest Yen 3 billion (US\$30 million) in the next five years to support industry-university-government efforts for developing next-generation 3D printers that can produce sand molds 10 times faster than now. The National Institute of Advanced Industrial Science and Technology will lead the project in cooperation with several Japanese companies and Waseda University.

Translation of a Nikkei article-May 29, 2013

JAPAN: Goal to Have 10 Japanese Universities in the World's Top 100

The GOJ Education Revitalization Committee submitted a proposal on the university education system in Japan to Prime Minister Abe. PM Abe is convinced that the university education system is the source of Japan's competitiveness and therefore essential to Japan's growth strategy. The proposal included improving the internationalization of universities in order to have at least 10 Japanese universities ranked in the world's top 100 universities, proactive recruitment of foreign faculty members, more classes in English, and providing more autonomy to university presidents.

Translation of a Nikkei article-May 28,2013

JAPAN: American Lab Equipment Twice as Costly when Exported to Japan

The National Institute of Science and Technology Policy reported that Japanese research institutions pay twice as much as the amount spent by their U.S. counterparts in procuring life science-related laboratory equipment produced by American companies. According to the story, five out of six sampled American scientific instruments, including a DNA sequencer and real-time polymerase chain reaction (PCR), were almost twice as expensive when Japanese labs imported them from America. The price differences reportedly reflected shipment and maintenance costs, as well as overcharging by U.S. manufacturers in some cases.

Translation of an Asahi article-May 30, 2013

JAPAN: Robots to Check Infrastructure Deterioration

Via industry-university-government collaboration, the Ministry of Land Infrastructure and Transport (MLIT) will support the development of robots that can check the deterioration of bridges and tunnels. Critical infrastructure that was built in the 60's and 70's has deteriorated and needs to be improved. MLIT will also try to coordinate the application of detection robots in other fields.

Translation of a Nikkei article-May 27, 2013

JAPAN: Japanese Team Discovers Mud Rich in Rare Earths in Indian Ocean

A team led by Yasuhiro Kato, professor at the University of Tokyo, announced that they have discovered mud containing rare earth elements beneath the deep sea floor in the eastern region of the Indian Ocean. Rare earths are used in such products as parts for hybrid car. This is the first discovery of mud containing rare earths in the seabed in waters other than the Pacific Ocean. Commercial extraction is extremely difficult because the mud deposits lie in deep sea areas, but it is now conceivable that there are rare earth elements in the seabed in a wide range of areas, even though such resources are only found onshore in a few countries. The team discovered mud rich in rare earths in waters approximately 1,000 kilometers from the western part of Jakarta, Indonesia. As a result of analyzing the mud collected in cooperation with the U.S. and other countries, the team found that mud extracted from depths of 75 to 120 meters from the sea floor, 5,600m below the ocean surface, contained rare earth elements at a maximum concentration of roughly 1,100 ppm (parts per million).

Translation of a Nikkei article-May 21, 2013

KOREA: International Student Conference

The International Conference for the Integration of Science, Technology and Society (ICISTS), a non-profit organization run by the students of Korean Advanced Institute of Science and Technology (KAIST), will hold its ninth annual event from August 5-9, with a theme of "Perfect Alliance: Coexistence of Human Society." Some 300 students from 22 countries participated in the ICISTS-KAIST last year and attended lectures given by 40 scholars. This year's event will feature the 16-year-old inventor, scientist, and cancer researcher Jack Thomas Andraka, the founder of the "One Laptop per Child" project Water Bender, and Chemistry Nobel Prize laureate Harold Walter Kroto.

http://www.kaist.edu/english/01_about/06_news_01.php?req_P=bv&req_BIDX=10&req_BNM=ed_news&req_VI=4182&req_PC=0&req_CG=&sCATE=&sCHAR=

SINGAPORE: Silicon-based Optical Modulator

The Institute of Microelectronics designed and developed a silicon-based optical modulator for ultra fast long-distance telecommunications. The device will enable a download speed 50% faster than present. The technology can be realized with existing industry fabrication processes, paving the way for affordable high speed data communications.

<http://www.a-star.edu.sg/Media/News/PressReleases/tabid/828/articleType/ArticleView/articleId/1830/Default.aspx>